In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Previously Presented) A method for enhancing treatment with an anti-CD20 antibody or a fragment thereof in a subject having cancer comprising

administering to a subject in need thereof an agent of Formula I, and an anti-CD20 antibody or a fragment thereof a therapeutically effective amount, wherein Formula I is

PR

wherein P is a targeting group which binds to the reactive site of post proline-cleaving enzyme, and R is a reactive group capable of reacting with a functional group in a post proline cleaving enzyme.

2. (Currently Amended) The method of claim 1, wherein antibody dependent cell-mediated [[cytoxicity]] cytotoxicity is enhanced.

3. (Currently Amended) The method of claim 1, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is an anti-CD20 antibody.

4.-6. (Cancelled)

7. (Previously Presented) The method of claim 1, wherein the anti-CD20 antibody is rituximab.

8. (Currently Amended) The method of claim 1, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is administered in a sub-therapeutic dose.

9. (Currently Amended) The method of claim 1, wherein the agent of Formula I is administered in a route of administration different from that of the anti-CD20 antibody or [[antibody]] fragment thereof.

10. (Currently Amended) The method of claim 1 or 7, wherein the agent of Formula I is administered orally and the anti-CD20 antibody or [[antibody]] fragment thereof is administered by injection.

11. (Currently Amended) The method of claim 1, wherein the agent of Formula I is administered prior to the anti-CD20 antibody or [[antibody]] fragment thereof.

12. (Currently Amended) The method of claim 11, wherein the agent of Formula I is administered 30 minutes to 8 hours prior to the anti-CD20 antibody or [[antibody]] fragment thereof.

13. (Currently Amended) The method of claim 11, wherein the agent of Formula I is administered 1 to 7 days prior to the anti-CD20 antibody or [[antibody]] fragment thereof.

14. (Currently Amended) The method of claim 1, wherein the agent of Formula I is administered substantially simultaneously with the anti-CD20 antibody or [[antibody]] fragment thereof.

15. (Currently Amended) The method of claim 1, wherein the agent of Formula I is administered after the anti-CD20 antibody or [[antibody]] fragment thereof.

16. (Currently Amended) The method of claim 15, wherein the agent of Formula I is administered 30 minutes to 8 hours after the anti-CD20 antibody or [[antibody]] fragment thereof.

17. (Currently Amended) The method of claim 15, wherein the agent of Formula I is administered 1 to 7 days after the anti-CD20 antibody or [[antibody]] fragment thereof.

18.-138. (Cancelled)

139. (Currently Amended) The method of claim 1 or 7, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is administered on a first day of a seven day cycle and the agent of Formula I is administered twice a day on day two through day seven.

140.-141. (Cancelled)

142. (Currently Amended) The method of claim 1, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is conjugated to a toxin derived from plant, fungus, or bacteria.

143. (Cancelled)

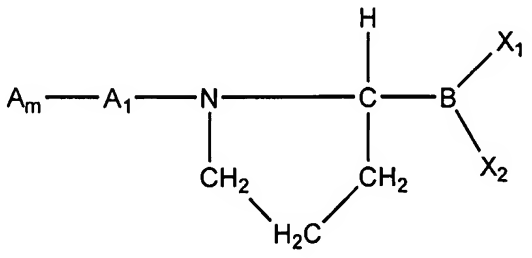
144. (Currently Amended) The method of claim 1, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is conjugated to a chemotherapeutic agent or a radioisotope.

145.-165. (Cancelled)

166. (Currently Amended) The method of claim 1, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is selected from the group consisting of tositumomab (BEXXAR) and ibritumomab tituxetan (ZEVALIN).

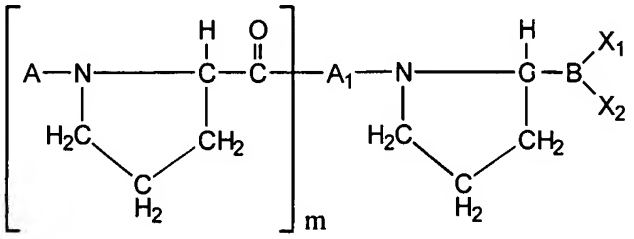
167.-250. (Cancelled)

251. (Previously Presented) The method of claim 1 or 7, wherein the agent of Formula I is



wherein m is an integer between 0 and 10, inclusive; A and A_1 are L- or D-amino acid residues; each A in Am can be a different amino acid residue; the C bonded to B is in the L-configuration; the bonds between A and N, A_1 and C, and between A_1 and N are peptide bonds; and each X_1 and X_2 is, independently, a hydroxyl group or a group capable of being hydrolyzed to a hydroxyl group in aqueous solution at physiological pH.

252. (Previously Presented) The method of claim 1 or 7, wherein the agent of Formula I is



wherein m is an integer between 0 and 10, inclusive; A and A_1 are L- or D-amino acid residues; A in each repeating bracketed unit can be a different amino acid residue; the C bonded to B is in the L-configuration; the bonds between A and N, A_1 and C, and between A_1 and N are peptide bonds; and each X_1 and X_2 is, independently, a hydroxyl group or a group capable of being hydrolyzed to a hydroxyl group in aqueous solution at physiological pH.

253. (Previously Presented) The method of claim 1 or 7, wherein the agent of Formula I is selected from the group consisting of L-Val-L-boroPro, L-Met-L-boroPro, and L-Ile-L-boroPro.

254. (Previously Presented) The method of claim 1, wherein the agent of Formula I is in a cyclic form.

255. (Previously Presented) The method of claim 1, wherein the agent of Formula I is administered in an amount that increases lymphoid tissue levels of IL-1, G-CSF or IL-8.

256. (Previously Presented) The method of claim 1, wherein the agent of Formula I is administered in an amount that does not increase serum IL-1 levels.

257. (Previously Presented) The method of claim 255, wherein the IL-1 is IL-1α or IL-1β.

258. (Previously Presented) The method of claim 1, wherein the subject is otherwise free of symptoms calling for hematopoietic stimulation.

259. (Previously Presented) The method of claim 1, wherein the agent of Formula I is administered on a routine schedule.

260. (Previously Presented) The method of claim 1, wherein the subject is HIV negative.

261.-337. (Cancelled)

338. (Previously Presented) The method of claim 251, wherein the agent of Formula I is at least 96% pure L-isomer.

339. (Cancelled)

340. (Previously Presented) The method of claim 1 or 7, wherein the cancer is refractory cancer.

341. (Previously Presented) The method of claim 340, wherein the agent of Formula I is L-Val-L-boroPro.

342. (Previously Presented) The method of claim 341, wherein the cancer is chronic lymphocytic leukemia or Non-Hodgkin's lymphoma.

343. (Currently Amended) The method of claim 342, wherein the anti-CD20 antibody or [[antibody]] fragment thereof is administered on a first day of a seven day cycle and the agent of Formula I is administered twice a day on day two through day seven.

344. (Previously Presented) The method of claim 343, wherein the cycle is performed once, twice, three times or four times.

345. (Previously Presented) The method of claim 344, wherein the cancer is refractory to prior treatment comprising a chemotherapeutic agent.

346. (Previously Presented) The method of claim 1 or 7, wherein the cancer is chronic lymphocytic leukemia or Non-Hodgkin's lymphoma.

347. (Previously Presented) The method of claim 139, wherein the cycle is performed once, twice, three times or four times.

348. (New) The method of claim 1, wherein the anti-CD20 antibody or fragment thereof is a human anti-CD20 antibody or fragment thereof that is not conjugated to a radioisotope.